



"THE REQUIREMENTS GENERATION PROCESS"

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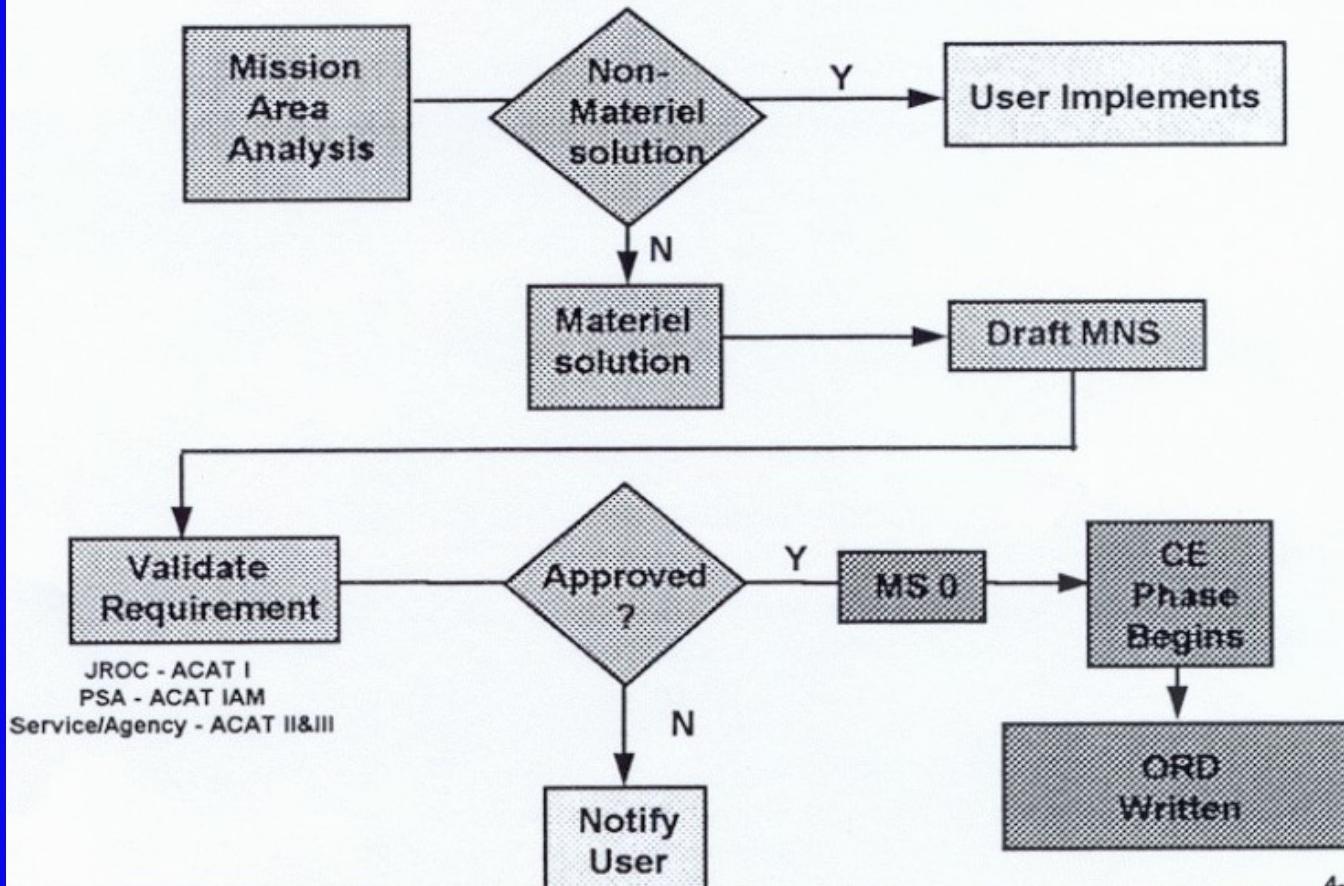


THE REQUIREMENTS PROCESS

- Requirements generation is a process
- From the field to the Pentagon to Wright-Patterson
- The Need - the Money - the Contract - the Delivery



Requirements Generation Process





OPERATIONAL REQUIREMENTS DOCUMENT (ORD)

- **Identifies the performance requirements necessary to meet an operational need**
 - **Defines desired characteristics and capabilities**
 - **Defines thresholds, objectives and key parameters**
 - **requirements Correlation Matrix (RCM)**
 - **Prepared in first phase (CE) of program**
 - **updated at each M/S**

Unless otherwise stated, there are no dollar constraints.



OPERATIONAL REQUIREMENTS DOCUMENT (ORD)

- ORD includes description of
 - Operational capability
 - Threat
 - Shortcomings of Existing systems
 - Integrated Logistics Support
 - Infrastructure Support and Interoperability
 - Force Structure
 - Schedule



RESERVE COMPONENT EMPLOYMENT 2005 STUDY (RCE-05)

- Looked at better ways to use National Guard and Reserve Forces, concluded
 - Should have expanded role in homeland defense
 - provide infrastructure defense in event of WMD use CONUS
 - expand counter drug role
 - national missile defense?
 - Could reduce active force ops tempo
 - Needs role clarification for major conflicts

Bottom line: Any role expansion increases AFRC staff involvement in acquisition/sustainment.



AND NOW . . .

- **The ORD is just the requirements in user language describing necessary performance characteristics**
 - It does not address many design considerations in contractual detail
- **AFMC challenge is to translate and expand ORD into a format that describes the system in contractual terms ensuring affordability, testability, sustainability, etc.**

User involvement is key to ensuring the translation is accurate!



ACQUISITION REQUIREMENTS DOCUMENTS

- **System Requirements Document(SRD)**
 - Translates the ORD into engineering language and specification format
- **Specifications**
 - Translates the system requirements document into component engineering characteristics
 - allocates requirements to subsystems
 - determines test requirements to ensure compliance
- **Specifications are system related, and may outlive the contract for which it was developed**
 - If kept current, it will accurately describe what was built
 - not what was done



PMD PROGRAM MANAGEMENT DIRECTIVE

- **Pentagon Guidance to the Field**
- **The Program Managers Contract for Cost Schedule and Performance**



STATEMENT OF OBJECTIVES/WORK

- **Statement of Objectives:** top-level description of what the contractor has to do
- **Statement of Work (SOW):** description of what the contractor will actually do during the contract period of performance
 - This is always associated with the contract, not necessarily the system
 - Contract Data Requirements List (CDRL): describes form/format/frequency etc. of data deliverables

SOW describes what the contractor is to do, not what the end-product does or looks like.



WHAT DOES IT MEAN?

- **Programs need requirements**
- **Requirements can result from**
 - New/forecasted threat
 - technological opportunity
- **The “Granularity” of the requirements drive contractor risk**
 - If you cannot define it, industry cannot price it
- **Each piece of the process must relate to each other**



HOW TO ENSURE EVERYTHING IS COVERED

- **Contract Requirements Correlation Matrix**
 - Started by SPO
 - part of RFP
 - Finished by contractors
 - part of Proposal

This becomes the roadmap for reading the proposal to ensure the requirements are all addressed.



SUMMARY

- Requirements definition is the toughest part of acquisition
 - Fuzzy process with no clear cut end
- Requirements definition is the province of the user, the acquisition community, and industry
 - Everyone has to try to understand the others' perspectives and limitations
- Requirements definition is the cornerstone of programs